

REMARKS

The Office Action dated August 9, 2007, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 2, 5-18, and 22 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added. Claims 1-22 are respectfully submitted for consideration.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO Application No. 200291785 to Bajko et al. (Bajko), in view of WO Application No. 200036869 to Le et al. (Le). This rejection is respectfully traversed.

Independent claim 1, upon which claims 2-6 are dependent, recites a method that includes storing in a user information store a plurality of identities in association with a first serving controller, the plurality of identities being associated with respective registration statuses selected from a registered status and an unregistered status. The method also includes detecting that a user equipment has requested a registration to a second serving controller using at least one of said plurality of identities. The method additionally includes issuing a registration termination request identifying the at least one of the plurality of identities, which has been newly assigned to the second serving controller as a result of the requested registration. The method further includes responsive to the registration termination request, issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a

registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller.

Independent claim 8, upon which claims 9-13 are dependent, recites a system that includes a first serving controller. The system also includes a user information store, which holds for a user a plurality of identities in association with the first serving controller, the plurality of identities being associated with respective registration statuses selected from a registered status and an unregistered status. The system additionally includes a second serving controller configured to transfer to the user information store a user authentication request identifying the user equipment. The user information store is operable to detect the user authentication request and comprises means for inserting into a registration termination request issued to the first serving controller each identity of that user equipment, which was newly associated to the second serving controller as a result of the user authentication request. The first serving controller is operable, responsive to the registration termination request, to issue a re-registration notification to the user equipment including each identity which has a registered status and which was not assigned to the second serving controller as a result of the user authentication request, and disassociate all identities of the said user equipment from the first serving controller.

Independent claim 14, upon which claims 15-17 are dependent, recites an apparatus that includes an interface configured to communicate with a user information store. A plurality of identities, each with respective registration statuses, associate a user

equipment with the serving controller and being operable, responsive to a registration termination request received from the user information store, to issue a re-registration notification to the user equipment including each identity which has a registered status and which incorrectly associates the user equipment with the first serving controller, and disassociate all identities of the said user equipment from the serving controller.

Independent claim 18, upon which claims 19-22 are dependent, recites a system that includes storing means for storing in a user information store a plurality of identities in association with a first serving controller, the plurality of identities being associated with respective registration statuses selected from a registered status and an unregistered status. The system also includes detecting means for detecting that a user equipment has requested a registration to a second serving controller using at least one of said plurality of identities. The system additionally includes issuing means for issuing a registration termination request identifying the at least one of the plurality of identities, which has been newly assigned to the second serving controller as a result of the requested registration; notification means for issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration. The system further includes disassociating means for disassociating all identities of the said user equipment from the first serving controller. The notification and disassociating means are responsive to the registration termination request.

As will be discussed below, the combination of Bajko and Le fails to disclose or suggest all of the elements of any of the presently pending claims.

Bajko discloses a communication system including a first control entity and a second control entity. A user is provided with at least one registration at the first control entity. The registration of the user at the first entity is transferred to the second control entity in response to another registration of the user at the second control entity. The system may include storage means for storing subscriber information and providing the control entities with subscriber information. An expiry time of a registration of the user or information associated with the status of a registration of the user may also be stored in the storage means. Any of the registrations may expire in response to the expiry of a timer. See abstract of Bajko.

Le generally describes a scheme for providing mobility management for terminals with multiple subscriptions. Le integrates Europe's Universal Mobile Telecommunications Standard (UMTS) subscriber identity module-specific procedures into single procedures, and which uses a common TMSI. A UMTS subscriber identity module is allocated for each subscription associated with a mobile terminal, wherein each UMTS subscriber identify module being identified by an identification code. A location area update is performed by providing a single location area update request message comprising a list of identification codes for each UMTS subscriber identity module associated with the mobile terminal. Each USIM is authenticated separately, and some USIMs may fail, while others may succeed authentication. See abstract of Le.

It is respectfully submitted that Le fails to disclose or suggest, at least, “responsive to the registration termination request, issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller,” as recited in independent claim 1. However, the Office Action took the position that page 30, lines 3 to 16, and page 32, lines 6 to 23 of Le teaches these features. The Office Action further took the position that figure 7 of Le discloses “disassociating all identities of the said user from the first serving controller.” Applicants respectfully disagree with the Office Action’s position.

As discussed above, Le proposes a scheme for providing mobility management for terminals with multiple subscriptions. The proposed scheme is intended to achieve high efficiency of signaling procedures over the air interface, and makes use of a TMSI assigned to a mobile station to allow all USIM IDs to be addressed with a single command.

Figure 7 of Le shows the procedure for location update in the described system. As part of a location update procedure, a cancel location message 720 is sent from the HLR to an old VLR, to instruct the old VLR to erase the subscriber record information in the old VLR. Thus, Le describes sending of a registration termination request (i.e. the cancel location message 720) and the disassociation of all entities of the user from the old VLR.

There is no teaching or suggestion in Le that in response to this message a re-registration notification is issued to the user. In fact, Le describes that the only message sent in response to the cancel location messages is a location cancellation acknowledgement message.

It is respectfully noted that page 30, lines 3 to 16, of Le merely describes the ability of the mobile station to send messages to the network to individually and dynamically manage the addition or deletion of USIM-IDs. However, only the sending of messages from the mobile station is described, no messages are issued to it. Similarly, there is no teaching or suggestion of issuing of a re-registration notification to the user in response to a registration termination request on page 32, lines 6 to 23.

Furthermore, Le specifically teaches a different mechanism for obtaining the required information on page 27, lines 15 to 24. In fact, Le teaches a scheme which does not involve the sending of any re-registration notification to the user. Rather, as part of the location area update procedure, the “new serving MSC/VLR interrogates the old MSC/VLR to obtain the USIM-IDs. The old MSC/VLR then sends the OLRU” (Ordered List of Registered USIM-IDs). Thus, Le teaches that the list of registered USIM-IDs is transferred to the new serving controller in response to a specific request for the information to the old serving controller, and therefore not in response to the registration termination request. In addition, Le does not disclose or suggest that this information should be passed on to the mobile station in the form of a re-registration notification, but

rather the information is bound with the new TMSI in the new serving controller and used without re-registration.

Instead, Le only teaches the action of disassociating all identities of the said user from the first controller and does not teach any re-registration notification message that can be sent to the user at all.

The Office Acknowledged that Bajko fails to disclose or suggest the above-described feature. Thus, it is respectfully submitted that the combination of Le and Bajko fails to disclose or suggest, at least, “responsive to the registration termination request, issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller,” as recited in independent claim 1. As such, it is respectfully requested the rejection of claims 1, 8, 14, and 18 be withdrawn.

Claims 2-6, 9-13, 15-17, and 19-22 are dependent upon claims 1, 8, 14, and 18, respectively. Accordingly, claims 2-6, 9-13, 15-17, and 19-22 should be allowed for at least their dependence upon claims 1, 8, 14, and 18, and for the specific limitations recited therein.

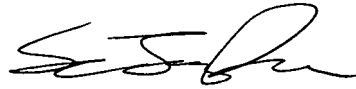
It is respectfully submitted that Bajko and Le fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render

the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-22 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for Extension of Time – 1 Month
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